

(19) World Intellectual Property
Organization
International Bureau



20 APR 2005



(43) International Publication Date
21 May 2004 (21.05.2004)

PCT

(10) International Publication Number
WO 2004/042853 A1

- (51) International Patent Classification⁷: **H01M 6/14**
- (21) International Application Number:
PCT/US2002/034875
- (22) International Filing Date: 30 October 2002 (30.10.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicants and
(72) Inventors: SMITH, Novis, W. [US/US]; 1830 Columbia Avenue, Folcroft, PA 19032-0005 (US). KEJHA, Joseph, B. [US/US]; 1830 Columbia Avenue, Folcroft, AP 19032-0005 (US).
- (74) Agent: WOBENSMITH, Zachary, T., III; 6091 Carversville/Wisner Road, P.O. Box 370, Pipersville, PA 18947-0370 (US).
- (81) Designated States (*national*): CA, JP, KR, US.
- (84) Designated States (*regional*): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR).
- Declaration under Rule 4.17:**
— *of inventorship (Rule 4.17(iv)) for US only*
- Published:**
— *with international search report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*



WO 2004/042853 A1

(54) Title: SEPARATORS FOR ELECTROCHEMICAL DEVICES HAVING AN IONICALLY CONDUCTIVE SOLID COMPOUND THEREIN

(57) Abstract: Separators for electrochemical devices, which devices have a polymer gel electrolyte separator with an ionically conductive fluoride based solid compound, or a solid state separator with an electrolyte and an ionically conductive fluoride based solid compound.